

KENYON BRIDGE  
(Blacksmith Shop Bridge)  
National Covered Bridges Recording Project  
Spanning Mill Brook, Town House Road  
Cornish City  
Sullivan County  
New Hampshire

HAER NH-40  
*NH-40*

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
National Park Service  
U.S. Department of the Interior  
1849 C Street NW  
Washington, DC 20240-0001

## HISTORIC AMERICAN ENGINEERING RECORD

### KENYON BRIDGE (Blacksmith Shop Bridge) HAER No. NH-40

LOCATION: Spanning Mill Brook, Town House Road, Cornish, Sullivan County, New Hampshire  
UTM: 18.714104E .4815617N, Mt. Ascutney, NH-VT Quad.

DATE OF CONSTRUCTION: Traditionally dated 1882

BUILDER: Attributed to James F. Tasker

PRESENT OWNER: Town of Cornish

PRESENT USE: Pedestrian bridge

SIGNIFICANCE: The Kenyon Bridge is an extraordinarily well-preserved example of a multiple kingpost covered bridge by noted builder James F. Tasker.

HISTORIAN: Dr. Mark M. Brown, August 2003

PROJECT INFORMATION: The National Covered Bridges Recording Project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. HAER is administered by the Historic American Buildings Survey/Historic American Engineering Record, a division of the National Park Service, U.S. Department of the Interior. The Federal Highway Administration funded the project.

## Description

Kenyon Bridge crosses Mill Brook on an almost east-west axis.<sup>1</sup> This twenty-eight panel, multiple Kingpost truss covered bridge has overall dimensions of 96' x 14-1/2'.<sup>2</sup> The bridge rests on dry stone abutments topped with concrete slabs. The west abutment shows evidence of several repairs or construction phases to the stonework. The bottom chords consist of two 6" x 9-1/2" timbers supported by pairs of 8'-1" x 6" x 12" bed timbers resting on creosoted crib work. Bolted metal bars, driven through the members of the bottom chord, transfer the tension across splices in the bottom chords. Each timber of the top chords measures 6" x 7". Typical kingposts are about 5-3/4" x 7" and 9'-11" high – the later dimension also represents the approximate depth of the truss. Given the way the bottom chords are notched into the typical kingposts, the effective section for tensile loads is about 4" x 7". The center-span kingposts are about 6" x 10". Diagonal 4-3/4" x 5-3/4" braces lean toward the center of the span and are notched into the vertical kingposts. Two longitudinal guard boards, 1" x 6" and 2" plank that ranges upwards of an impressive 1'-5", protect the trusses from vehicles. The current deck is about 10'-5" between the curb planks with 3" x 10" deck beams and is cambered. There is no lower lateral bracing system, though there is also no noticeable sign of horizontal drift.

Five horizontal members, four diagonals, and knee braces form the upper bracing system. The diagonals cross nearly five panels and are arranged with their downstream ends closest to the mid-span kingpost. These diagonals are toe nailed and screwed (the bolts lack nuts) to the top chord and as such are presumably replacements. The knee braces are notched into the horizontal braces. Bolts and toe nails secure the other ends of the knee braces to the kingposts.

Roof plates rest on top of the kingposts and support rafters, sheathing boards, wood shingles (many attached with wire nails), and a corrugated sheet metal roof.

The bridge is in remarkable condition, but there are repairs on the east end. Both end posts have been reinforced with "L" -shaped members that replace the lower chord connection and are also spliced to sound part of the old members. Shear dowels and bolts (some concealed where they would otherwise be visible) secure the splice. Two diagonal braces in panels 3 and 4 of the upstream truss have also been soldiered and similarly connected with bolts and shear pins. In comparison to these repairs, the tops of several kingposts are cracked and have been stabilized with bolts in a much less elegant manner.

## History

The Selectman's reports for Cornish, New Hampshire, dated March 1, 1883, included several

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<sup>1</sup> The bridge is referred to in historic documents as Kenyon Bridge and is also commonly known as Blacksmith Shop Bridge.

<sup>2</sup> These dimensions are found in John Dryhout, "Blacksmith Shop Covered Bridge," Nomination Form, National Register of Historic Places, June/July 1974, Section 7, and are not confirmed. The remaining dimensions were measured during a site inspection in June 2003. Richard G. Marshall, in *New Hampshire Covered Bridges: A Link with Our Past* (Nashua, N.H.: New Hampshire Dept. of Transportation, 1994), 41, reports the bridge is 91' long.

entries of interest to covered bridge historians:

James F. Tasker, building bridge and raising abutments near Mercer place	621.00
James F. Tasker, building bridge near N. C. Sturtevant's	873.00
James F. Tasker, rebuilding abutments and wing walls at Mercer bridge	174.40
James F. Tasker, stone work and filling roadway at Kenyon bridge	40.50
George G. Kenyon (1881)	2.70
James F. Tasker, rebuilding Dingl'ton b'dg,	812.00 <sup>3</sup>

These entries can only refer to none other than the noted bridge builder James F. Tasker (b. 1826, Cornish, N.H. - d. 1903, Claremont, N.H.).<sup>4</sup> Tasker, most noted for his work on the celebrated Cornish-Windsor Bridge across the Connecticut River, built many bridges in Cornish and throughout New England.<sup>5</sup> This much of the Selectman's report is clear: Tasker was paid \$812.00 sometime during 1882 for rebuilding the Dingleton (Cornish Mills) Bridge, a multiple Kingpost truss covered bridge just a short distance downstream from the Kenyon Bridge. The reference to "Kenyon Bridge" is also clear. According to an 1860 map of Sullivan County, New Hampshire, musicians George D. Kenyon and his brother Isaac lived on the hill immediately to the east of the Kenyon Bridge that still bears their name.<sup>6</sup> Covered bridge historians who have reviewed Cornish records have, perhaps correctly, interpreted the \$873 entry for the bridge near N.C. Sturtevant's to be the Kenyon Bridge. While the historian might reasonably presume that the two terms "bridge near N.C. Sturtevant's" and "Kenyon bridge" in the same document implies a distinction, Michael Yatsevitch, a long time resident and Selectman, observes that he has often heard the same person use different names for the same place in the course of a conversation.<sup>7</sup> It might be better to ask who was N.C. Sturtevant, where did he live, and what is the origin of the name "Blacksmith's Bridge"?

Nahum Chase Sturtevant (1816-1888) was a "wheelwright and general mechanic."<sup>8</sup> Might he be "the" blacksmith? Perhaps, especially since narrow bands of metal, not unlike that used for wheel rims, can be found in the stream bed uphill from the Kenyon Bridge near what could be the remains of a waterwheel pit. Furthermore, his son Charles Thomas Sturtevant had a blacksmith shop in the village of Cornish Flat.<sup>9</sup> On the other hand, the 1860 map shows no Sturtevants anywhere in the Town of Cornish, though they were clearly residents. Information

<sup>3</sup> *Reports of the Selectmen and other Town Officers of Cornish, N.H.* (Town Clerk's Office, Town Office, Cornish, N.H., March 1, 1883), pp.4-5.

<sup>4</sup> William H. Child, *History of the Town of Cornish, New Hampshire with Genealogical Record: 1763-1910*, Volume II (Concord, N.H.: The Rumford Press, 1910[?]), 363-64. Tasker appears in many other Town reports, including, but not limited to: 1851 (p. 4), 1875 (p. 4), 1876 (pp. 5, 7), 1877 (p. 6), 1878 (p. 6), 1885 (p. 5).

<sup>5</sup> Historic American Engineering Record (HAER), National Park Service, U.S. Department of the Interior, "Cornish-Windsor Bridge," HAER No. NH-8. For an example of a multiple kingpost bridge that has been reinforced with arches, see HAER, National Park Service, U.S. Department of the Interior, "Taftsville Bridge," HAER No. VT-30.

<sup>6</sup> Henry Francis Walling, *Topographical Map of the County of Sullivan, New Hampshire* (New York: W. F. Walling, 1860); Child, *History of the Town of Cornish*, Volume II, 243-44.

<sup>7</sup> Michael Yatsevitch, who served as Cornish Selectman for thirty-two years and served thirty years on the Cornish School Board, personal conversation with author, July 9, 2003.

<sup>8</sup> Child, *History of the Town of Cornish*, Volume I, 361.

<sup>9</sup> Child, *History of the Town of Cornish*, Volume I, 185-86.

uncovered by John Dryhout suggests that the name "Blacksmith" refers to the "shop operated nearby in the area called 'Slab City' by John Fellows (1798-1884)."<sup>10</sup> Fellow's blacksmith shop is recorded on the 1860 map, but on the other branch of Mill Brook that drains the south sector of the Town.

The 1860 map reveals several other items of interest. "J F Tasker" lived just downstream from the Kenyon Bridge, and there was a sawmill just upstream. Indeed, one Town historian writes: "A sawmill, not long since, stood on the brook in "Slab City," owned and operated during its last years by James F. Tasker."<sup>11</sup> Unfortunately the dates of the sawmill's operation are unknown, but it is intriguing to speculate that the timber for the Kenyon Bridge might have been sawn immediately upstream. "Slab City" refers to a no longer extant village near Kenyon Bridge that tradition says was built of waste wood, or "slabs," from the sawmill.<sup>12</sup>

While the documentary record might be seen as ambiguous about the builder and date of the Kenyon Bridge, it is generally accepted that Tasker built the following extant bridges:

Kenyon Bridge, Cornish, NH;  
Blow-Me-Down Bridge, Cornish, NH;  
Dingleton Bridge, Cornish, NH;  
Meriden Bridge, Cornish, NH;  
Cornish (NH)-Windsor (VT) Bridge (with Bela Fletcher) (see HAER No. NH-8);  
Stoughton Bridge, Windsor County, VT; and  
Salmond's, Windsor County, VT.<sup>13</sup>

In 1983, Milton S. Graton made important repairs to the Kenyon Bridge. According to the dedication program, these included:

1. Jacking the bridge and relaxing its stresses;
2. Repairing stone abutments;
3. Leveling bridge and installing new bearing shoes;
4. Repairing and replacing deteriorated floor joists, truss members and other structural components;
5. Replacing plank flooring and sidewall sheathing;
6. Improving roadway ramps or approaches.

A few of these repairs are straightforward in light of the description earlier in this report. Others deserve comment. Graton raised the bridge and changed the approaches so that water run-off

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<sup>10</sup> John Dryhout, "Blacksmith Shop Covered Bridge," Section 8.

<sup>11</sup> Child, *History of the Town of Cornish*, Volume I, 182.

<sup>12</sup> Yatsevitch, personal conversation, July 9, 2003.

<sup>13</sup> David W. Wright and Joseph Conwill of the National Society for the Preservation of Covered Bridges, personal conversations with author, August 6 and 19, 2003.

from both sides of the valley is channeled away from the bottom chords and the bed timbers.<sup>14</sup> "Other structural components" included adding upper lateral bracing, since there had been none before.<sup>15</sup> "Relaxing a bridge's stresses" was a term used by Milton S. Graton for removing the loads from the structure.<sup>16</sup>

The March 1983 town meeting voted to restrict the bridge to non-vehicular traffic in preparation for Graton's repairs the following summer. On October 12, 1993, the New Hampshire State Supreme Court ruled in favor of the town in the case of *Norman A. Phelps v. Town of Cornish & a.* Apparently Phelps wanted the Kenyon bridge strengthened so that he could drive a pick-up truck across it to land he owned on the east side of the brook. Not only was Phelps aware that the bridge was closed to traffic, but he also knew at the time of purchase that his property was zoned against habitation. The town denied Phelps's request, and the court held in its favor.<sup>17</sup>

The bridge was placed on the National Register of Historic Places in the mid-1970s.

## Significance

Of the forty-five covered bridges still extant in New Hampshire built in the nineteenth and twentieth centuries through 1937 (including those crossing state lines), there are only four multiple kingposts. Each and every New Hampshire kingpost can be safely attributed to Tasker.<sup>18</sup> Writing in 1991, the President of the National Society for the Preservation of the Covered Bridges described the real significance of the Kenyon Bridge when he observed that it

has been so little altered over the years, once inside it, one needs practically no imagination at all to see just what kind of a structure it was that James F. Tasker built for us. Truly, it's almost as if he had just packed up his tools and gone home.<sup>19</sup>

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<sup>14</sup> Cornish Historical Society, "Blacksmith Shop Covered Bridge, Cornish, New Hampshire, Re-opening," Event Program, September 18, 1983; Brad Hills, "Milton S. Graton Repairing Yet Another Covered Bridge," *Union Leader* (Manchester, N.H.), July 27, 1983, n.p. Quotation from event program.

<sup>15</sup> David W. Wright, President, National Society for the Preservation of Covered Bridges, personal conversation with author, June 11, 2003, reports that the absence of upper lateral bracing was typical of Tasker's short bridges.

<sup>16</sup> Milton S. Graton, *The Last of the Covered Bridge Builders* (Plymouth, New Hampshire: Clifford-Nicol, Inc., 1986), 11; Arnold Graton Jr., Graton Associates and grandson of Milton S. Graton, personal conversation with author, July 21, 2003.

<sup>17</sup> *Norman A. Phelps v. Town of Cornish & a.*, Case No. 92-725; David W. Wright, President, National Society for the Preservation of Covered Bridges, personal conversation with author, July 24, 2003.

<sup>18</sup> Wright and Conwill, personal conversations with author, August 6 and 19, 2003.

<sup>19</sup> David W. Wright, President, National Society for the Preservation of Covered Bridges, to The Selectman, Town of Cornish, New Hampshire, September 20, 1991, in Kenyon Bridge folder, Town Files, New Hampshire Division of Historic Resources, Concord, New Hampshire.

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